

**Remarks of  
Jeffrey W. Runge, M.D.  
Administrator  
National Highway Traffic Safety Administration**

**For the**

***Automotive News World Congress*  
“Exceeding the Safety Challenge”  
January 18, 2005  
Detroit, Michigan**

***Slide # 1 Title Slide***

- Thank you, Peter for that introduction.
- It is an honor to be here again. Two years ago, when I addressed the Automotive News World Congress, I spoke with you about NHTSA’s priorities for this administration on both behavioral and vehicle safety issues.
- There have been significant improvements in automotive and highway safety since January of 2003, but many of our challenges remain the same. Much has changed over the last two years in our nation, economically, politically, and technologically, and it behooves us to re-examine where we are in that landscape.

***Slide # 2 Photo Bush/Mineta***

- Fortunately, one constant is that we have the same President. It has been an honor to be a part of President Bush’s Administration, who often reminds his appointees that “good policy makes good politics.” I think that was borne out on Election Day. For my part, I also believe that good science makes good policy.
- This is a fundamental value of government that Secretary Mineta and I share. I am sure you all are as pleased as I am that the Secretary has been asked to stay for the second term, and he has agreed to do so.

- One more word about Norm Mineta... He is known around many circles within the Administration as the “Safety Secretary.” That is reflected in the support and priority that he has given our agency.
- Some of you attended the DOT Holiday Party and heard the Secretary talk about the successes of the last year at DOT. Two of the three things he mentioned were the decline in highway fatalities and getting safety belt use to 80%.
- It is no accident that the name of the President’s highway reauthorization bill is *SAFETEA*. That debate will be heating up again in the Congress shortly, and I hope you will all exercise your rights in this democracy to weigh in heavily on *SAFETEA*... particularly as issues that are based only in political preference, rather than science... tend to find their way into the bill.
- In addition to giving you my thoughts on the state of traffic safety in our Nation, tonight I would like to announce to you the findings of a recent NHTSA study, which examined the number of lives saved by vehicle safety features between 1960 and 2002.

***Slide # 3 Lives Saved by Vehicle Safety Technologies, 1960 – 2002***

- This study brings to light the significant progress that has been made in vehicle safety over that time period. This report showcases the magnificent achievements this agency shares with the community of automotive engineers, and underscores the national treasure they constitute. It also offers a hint about the potential for new safety technologies in the years to come.
- Since 1960, about 329,000 lives have been saved by improvements in vehicle safety technologies.
- Of all the safety features added since 1960, one of them – safety belts – accounts for over half of all lives saved.
- But even as safety belt use rose, the lives saved by other safety technologies also rose steadily, with the largest proportion over the last two decades.

- The annual increase year to year is dramatic:
  - From 115 lives saved per year in 1960, to nearly 25,000 per year in 2002.
- The safety technologies we examined included safety belts, air bags, improvements in braking, energy absorbing steering assemblies, child safety seats, improved roof strength, side impact protection, shatter-resistant windshields and windshield bonding, door locks, and softening of interior point of contact.
- We did not include many of the newer technologies, such as side air bags and electronic stability control.
- The underlying message here is that the industry should be very proud of what it has accomplished, and we at NHTSA are also certainly very proud of our role.

#### ***Slide # 4 – Cost of Technologies***

- The study also examined the cumulative cost of the safety technologies.
- As you can see, it's quite a bargain. When you stop to consider that many new car buyers are more than willing to spend \$800 on luxury options for their vehicle, it's even more of a bargain. I doubt there is anyone out there who would give his life willingly for a CD changer or leather seats.

#### ***Slide # 5 – Old Haddon's Matrix***

- Just a reminder: NHTSA was endowed by our forefather, Dr. Haddon, with a way to look at road safety countermeasures that has endured through four decades. Certain countermeasures fall very neatly into the cells of the matrix.
- When you consider that most of the technologies we used for the “lives saved” analysis fall in to these cells having to do mostly with crashworthiness and you consider that we are just scratching the surface of

safety countermeasures directed toward crash avoidance, we can begin to envision what is possible for the future.

### ***Slide # 6 – New Haddon’s Matrix***

- What we see happening now is that the grid lines between passive safety and active safety are disappearing, as technology makes possible what was unimaginable in the 1960s. The lines between the cells are disappearing because of:
  - The advent of technologies that can mitigate crash forces by pre-crash sensing.
  - Vehicles that can communicate with their environment, or with other vehicles.
  - Advances in driver assistance technologies, so that the way humans interact with their machines is changing...so that avoidance maneuvers can come from either the driver or the vehicle, or perhaps even the environment.
- While all this is wonderful for the future, today we lost 115 of our fellow Americans to motor vehicle crashes. This will happen again tomorrow, and the next day and the next. So today, we have to work with the tools we have today, even as we look longingly toward what is possible in the future.

### ***Slide # 7 - Reversing the Trend – Overall Traffic Fatalities***

- The news is better than it was when I was here two years ago. For the first time in five years, the overall number of motor vehicle traffic fatalities declined.
- We cannot claim victory, of course, with 42,643 people still dying just trying to get to work, or on the job, running errands or taking a family vacation. But the decline is important, and noteworthy, especially in the face of increasing exposure. Americans continue to buy more cars, and drive more miles.

### ***Slide # 8 - Motor Vehicle Fatalities: Lowest Rate in Recorded History***

- This slide shows the trend in the traffic fatality rate, which accounts for the yearly increase in exposure. The traffic fatality rate is the lowest since NHTSA started keeping records 29 years ago.
- Secretary Mineta issued a challenge to us at DOT: To lower this rate to 1.0 per HMVMT by 2008. And we are making progress toward that goal, but we will not make it, unless things change.
- We are improving in the area of cars and trucks. The rate for cars and light trucks is right around 1.20. And last year there were 939 fewer fatalities in cars and light trucks than the prior year, something we should all be proud of.
- But our quest for 1.0 is being stymied by the increase in deaths and death rate on motorcycles. We lost about 400 more motorcyclists last year than the year before, contributing to a more than 70% increase in motorcycle fatalities over the last 6 years, and a fatality rate of over 38, 32 times the fatality rate of cars and light trucks.

### ***Slide # 9 - Highway Safety Priorities***

- When I spoke to this group in 2003, I discussed our 5 highway safety priorities, chosen because of the potential to save the greatest number of lives, which is the return we seek for the taxpayers' investment.
- Together, with the help of the automobile industry, the media, the Congress and many non-governmental organizations, we have made great strides in each of these priority areas. Let me give you a brief update on some of our important accomplishments.

### ***Slide # 10 - Safety Belt Use 1983 – 2004***

- Safety belt use increased to 80% in 2004 – a record high.
- Since 2000, safety belt use has increased 9 percentage points, which translates into over 2000 lives saved a year. Every percentage point we raise belt use saves the U.S. economy about \$800 million per year.

- The purpose for this intense effort to raise safety belt usage is readily obvious. Trying to engineer vehicles to protect the unbelted is not only challenging, it poses its own set of risks. Safety belts cut the risk of death in half among all crashes, but they must be worn to be effective.

### ***Slide #11 - Thank You***

- One reason for the success we saw is the industry's commitment to increasing safety belt use. We have seen evidence of the power of American business when working toward a cause.
- Many manufacturers, suppliers and dealers groups have been active in this area, by supporting the National Safety Council's Air Bag & Seat Belt Safety Campaign, NHTSA's nationwide "Click It or Ticket," or "Buckle Up America."
- Many of these same companies were instrumental in the passage of primary safety belt laws. Since I was last here, the States of Illinois, Tennessee, and Delaware have all passed primary belt laws. That would not have happened without the direct involvement of the American automotive industry.
- Several manufacturers have also heeded my request to install enhanced safety belt reminder systems.
- And I continue to encourage suppliers and manufacturers to improve safety belt performance and comfort, so that as belt use becomes routine, they will be more comfortable to wear and will be more effective in all types of crashes, especially rollovers.

### ***Slide # 12 - State Belt Laws and National Belt Use Rates***

- From this slide, you can see the relationship between the existence of State belt laws and belt use.
- There are still 29 States in our Nation without a standard safety belt law that would enable police officers to enforce belt wearing alone. It is vitally important, in the literal sense of the word, that more states upgrade secondary laws to primary.

- With six States and Puerto Rico now over 90% use, a nationwide 90% use rate is no longer a hallucination. It can happen. In fact, let me point out to those of you who may not know it, but you are sitting in the first state east of Arizona to reach 90% belt use. We are very proud of Michigan and grateful for their work in highway safety.

### ***Slide # 13 - Alcohol-related Fatalities 2003***

- On the impaired driving front, alcohol-related fatalities decreased by nearly 3% in 2003, representing the largest decrease in the rate since 1998, after several years with no progress. That decline means 511 people were spared the ravages of a drunk driving death; 511 families who were together this holiday season instead of in mourning.
- The high BAC driver is the lion's share of the problem, as you can see, and is not likely to respond to public health messages or even the threat of being stopped by the police.
- The vast majority of drivers in fatal alcohol-related crashes were over .08, and what is not shown here is that 50% of drivers in these fatal crashes had a BAC over .16, twice the legal limit.
- This population has a problem with alcohol and needs medical treatment. The significant 3% decrease in fatalities among this population shows that our strategy is working. That strategy includes
  - High visibility enforcement,
  - Better training of prosecutors,
  - DWI courts and
  - Screening for alcohol problems by medical professional and
  - Treatment

### ***Slide # 14 - Improve Vehicle Compatibility***

- We are still working diligently on solutions for incompatible vehicles interacting in a crash, which raises the risk of death or serious injury to the occupants of the smaller vehicle.

- The popularity of light trucks has not abated, which is great news to many in this room. But that popularity is accompanied by safety concerns that must be addressed.
- At NHTSA, we're addressing this concern with the recent upgrade to our side impact standard. We agree with many in the industry that the first item of business is to improve "self-protection" of vulnerable occupants.
- That's why I have made it a top priority to upgrade our standard 214 for side impact protection.
- It is no longer defensible to have a safety standard that does not address the head, when 56% of side impact deaths involve a brain injury.
- And it is no longer acceptable to protect only 50<sup>th</sup> % ile males who are struck at 90 degrees. Our proposal, would add head protection for drivers and passengers whether they are my size or my Mom's size, and even if the striking vehicle didn't take a perfect 90 degree aim.
- Of all the rulemakings that have occurred during my watch at NHTSA, none will have a greater life saving effect. We expect the new side impact standard to save between 700 and 1100 lives per year.
- A thousand people dead of the same cause in a year would be an outbreak if we were speaking of infectious disease. We have a vaccine for this disease, and I can't wait to start inoculating the population. Every month's delay in enacting the standard literally costs people's lives.
- I want to thank those in the industry who collaborated on the voluntary agreement for side impact protection. That work was vital in informing NHTSA as to the feasibility and favorable cost-benefit of the 214 upgrade.
- I also want to thank the broader industry for the work done in the Side Airbag Technical Working Group to make sure that side airbags do not pose their own injury risk, especially for children and small adults. The experience so far has been very positive, and our worst fears of unintended consequences have so far been avoided.



- We think it is important enough that we now include a list of vehicles with side air bags on [safercar.gov](http://safercar.gov), and include a checkmark if a vehicle meets the Technical Working Group's requirements on side airbags.
- With self protection addressed, there is still more work to be done on partner protection for the striking vehicle. We need your inventive and creative solutions to address this dangerous situation.
- I must say that I was delighted to note at the auto show how many of the new designs seem to be sensitive to managing the forces of the striking vehicle. Although you can't tell much by looking at the outside skin, I think the unibody crossover vehicles are clearly a better partner for a side crash.

#### ***Slide # 15 - Reduce Rollovers***

- When I was here in '03, I made it abundantly clear that rollover was a top priority of mine... and that I expected market forces to work toward improvements in rollover resistance, but only if consumers paid attention to the rollover ratings. We have not won the war on rollovers yet, but we are seeing progress.

#### ***Slide # 16 - Vehicle and Fatalities by Collision Type***

- There are a lot of people, particularly in the industry, who take issue with my emphasis on rollovers. So I thought I would show this slide again so there can be no mistake about our reasoning and resolve.
- My job is really very simple. When the Secretary gave me my marching orders, he said only one thing: "Jeff, Get those numbers of fatalities and injuries down." That was it. Very straightforward. So I ask you which of these charts deserves our attention more? Is it more important that rollovers are less than 3% of crashes, or that they are a third of our occupant fatalities.
- Let me say that another way: of the 31,904 vehicle occupants who died in 2003, 10,376 died in a rollover. So I ask you, if you are in a position where your primary mission is to reduce the body count, which of these pie charts do you focus on?

- Our strategy for reducing rollover fatalities comes from the work of a team at NHTSA, and the countermeasures, while they take a long time to implement, are taking shape. To put it succinctly, it involves
  - Structural integrity,
  - Containment, and
  - Rollover avoidance.
- For structural integrity, the long-awaited upgrade of the roof crush standard will be published soon. It is still currently in review.
- For containment, the most important countermeasure is the wearing of safety belts, and we have talked about that. Three quarters of rollover fatalities were unbelted, the majority of whom were completely or partially ejected, and two thirds of people who are ejected die.
- We recognize that we also need to improve safety belt performance during a rollover, and our research on that is progressing. But I hope that the occupant restraint suppliers will beat us to the punch.
- We have a tremendous opportunity for ejection prevention with the upgrade of the side impact standard. Some manufacturers have already solved the difficulties with the deployment of side curtain airbags in a rollover to prevent ejection. If side airbags are the countermeasure that manufacturers will choose to comply with the new standard, we hope to realize a bonus in ejection prevention.
- And I hope most of you know, we recently proposed an upgrade to our door locks and retentions standard, also to help mitigate ejection.

### ***Slide # 17 - Safercar.gov Rollover Ratings***

- Finally, we have increasing opportunity to prevent the rollover in the first place. When I last spoke to you, I made the headline-producing assertion that all vehicles were not created equal regarding rollover resistance. And that it was up to the consumer to choose the vehicle with the best performance, if safety is what they value.

- Since that time, I have made consumer information a mainstay of our strategy. We have created a new Web site, [safercar.gov](http://safercar.gov), to help consumers find the information more easily, and have reorganized the Web site to make it user-friendly.
- The good news, though, is not the Web site, it's what's on it: The average of the rollover ratings for SUVs, vans, and pick-ups have all increased, and the range, (The darker color), has shifted well to the left toward more stars. This is great news.
- While we have tested a very limited number of vehicles with the dynamic fishhook test for the 2004 MY, the results are promising and show that 4 wheels can stay on the ground even in the most severe of maneuvers.
- We firmly believe that arming consumers with meaningful safety information is the surest and fastest way to implement safety technologies in the vehicle fleet.

#### ***Slide # 18 - 4-Star SUV Comparisons***

- The design of light trucks -- particularly SUVs -- is changing. They are becoming lower and wider -- increasing their stability, and thus improving their rollover star ratings.
- This slide shows you the dramatic increase in the number of 4-star rated SUVs last model year.
- In 2001 there was only one 1 SUV that achieved a 4-star rollover rating, and in the 2004 MY, there are now 10 SUVs with 4 stars.

#### ***Slide # 19 - Evolution of Vehicle Safety***

- While crashworthiness standards have been and will continue to be very important, we are reaching the point of diminishing returns by focusing only on crashworthiness.

- The biggest return on investment in terms of lives saved and injuries prevented in the future will come from accelerated development and deployment of crash avoidance technologies.
- Over the past several months, my senior staff and I have met with members of the industry, suppliers and OEMs, as well as consumer groups, to present the need for this new focus.
- My goal was to recruit the automobile industry to work collaboratively with us, as we seek to understand these technologies, to prevent unintended consequences, and to try to envision how we might approach the issue of performance specifications for these technologies.
- In many ways, NHTSA is already behind schedule. Last week when touring the auto show, I was surprised to see many crash-avoidance and driver assist technologies already appearing in vehicles currently for sale.
- While we don't need a government regulation for everything, we do need to understand the expected performance characteristics. And we need to be able to respond to the public's expectation that crash avoidance systems, when deployed, will perform within certain parameters.

### ***Slide # 20 - Electronic Stability Control***

- At the show last week, I was delighted to see the proliferation of electronic stability control on many of the new model vehicles, especially those that are the most rollover prone per single vehicle crash.
- But we should not forget that a significant number of passenger car occupants also die in rollovers, and road departure crashes, whether they result in a rollover or not, can be reduced if control of the vehicle is maintained.
- We recently published data showing that electronic stability control reduces single vehicle crashes in SUVs by 67%, and in cars by 35%. Better yet, in this population of vehicles, ESC reduced FATAL single vehicle crashes in SUVs by 63%, and in cars by 30%.

- So we certainly do not want to ignore the benefits for passenger cars, even as we are struck by the degree of SUV crash reduction.
- I want to thank the manufacturers that offer ESC as a standard feature or plan to in the near future. It is an expensive decision. But if these numbers hold true for a wider sample of the fleet, the benefits will far outweigh the cost of the systems.

### ***Slide # 21 - Integrated Vehicle-based Safety Systems***

- We are also excited about the future of Integrated Vehicle Based Safety Systems. We have seen ITS technology become ready for deployment to help drivers avoid the most common type of deadly crashes – those involving rear-end collisions, road departures or lane changes.
- While not as lethal as rollover crashes *per crash*, these crashes account for 2.6 million crashes each year, 27,000 of them fatal.
- When you see numbers like this, you begin to see the scope of possibilities with crash avoidance systems, you can understand why we believe a change in emphasis is indicated.

### ***Slide # 22 - Cooperative Intersection Collision Avoidance Systems***

- We have other ITS activities with a longer range. Cooperative Intersection Collision Avoidance Systems looks at ways that technology can help drivers, vehicles and intersection signals and signs interact, saving lives and reducing injuries at hazardous intersections.
- In 2003, more than 9,000 Americans died in intersection-related crashes. It is quite possible to envision a day when your vehicle will refuse to strike another one at an intersection, leaving its side curtain air bag packed nicely into the roof rail.

### ***Slide # 23 - Next Generation 9-1-1***

- Congress recently gave NHTSA an enormous new responsibility. A new governmental structure was created to ensure that Wireless E-911 finally

gets deployed across our nation, and NHTSA will house a joint program office with the responsibility to make it happen.

- This is very important to our mission. If you will recall Haddon's Matrix earlier in my talk, you understand how important post-crash management is to the outcome of crash injury.
- Wireless E-911 technology used to be thought of as simply cell phone based technology. But with the advent of satellite technology in vehicles, and the robustness of Internet Protocol, the foundation for better emergency response in a wireless society must be laid.
- An ITS program we call "Next Generation 9-1-1" lays such a foundation. Currently, in our large and mostly rural nation, America's emergency number system is not equipped with technology to find vehicles after a crash, unless the location is verbally described.
- We see a day soon when text, data images and video can be transmitted to improve incident management, emergency response and trauma care.

#### ***Slide # 24 - Vehicle Infrastructure Integration***

- I also appreciate the industry's involvement in the Vehicle Infrastructure Integration program. This research program is intended to enable deployment of advanced vehicle-to-vehicle and vehicle-to-infrastructure communications that could keep vehicles from leaving the road and enhance safe movement through intersections.
- There is a need for deployment of technologies that can give society benefits today. We need the industry and the public to weigh in on what technologies are available sooner than later, and what government can do to enable speedier deployment.

#### ***Slide # 25 - International Harmonization***

- Turning to the international arena, where NHTSA has also been very active of late, there are two important areas of interest to the auto industry.

- Recently, the United Nations Working Party 29 passed the first Global Technical Regulation on door locks and retentions.
- While the safety gains in terms of lives saved by this regulation may be slight by comparison to others, the impact of passing a global standard will be significant. It showed that it can be done, and that the process works.
- This GTR paved the way for greater international cooperation and information sharing which will undoubtedly lead to significant cost savings and better-crafted regulations.
- I was encouraged to see senior representatives from GM, Ford and Daimler-Chrysler present for the signing of the GTR. I hope their presence was not merely symbolic, but that the industry will be committed to global harmonization of safety standards where we can.

### ***Slide # 26 - Global Road Safety***

- Another area of international activity has the potential to stimulate even greater gains in global road safety is the bringing of best traffic safety practices into the developing world. One important partner in this effort is the Global Road Safety Partnership, which started as a project of the World Bank. I want to thank the six auto-related companies who have recently announced significant financial support and expertise.
- I also want to thank GM for stepping up to contribute to the first Traffic Safety Data project by the Asia-Pacific Economic Cooperation, where 800,000 people die every year from road traffic incidents.
- I hope all of these efforts will be sustaining, and that your support of Global Road Safety will continue to grow.
- With more than 1.2 million fatalities worldwide occurring annually as the result of motor vehicle crashes, the safety challenge has never been greater.
- There is an enormous opportunity for the United States to be a good neighbor to others as their economies become more motorized and the risk

of that mobility rises. As Secretary Mineta said in his speech at the UN:  
“Morbidity should not be the cost of Mobility.”

- There are ample opportunities for public-private partnerships in Global Road Safety. A little money goes a long way in many of these countries. Working with the World Health Organization and the United Nation’s Working Party 1 for Global Road Safety is a great way to become involved.
- I hope to see all of you helping the World Health Organization as they seek to coordinate all of the activities in Road Safety worldwide.
- And I hope you, both industry and media, will make your presence known at the Working Party 1 of the UN Economic Commission for Europe as they seek to identify best practices for road traffic safety that can be adopted around the globe.
- The U.S. is a member of the ECE, as is Canada, but governments cannot make progress alone. We need your involvement to make our world a safer place.

***Slide # 27 - NTHSA Logo Slide***

- Indeed, the industry has made great strides in meeting the safety challenge.
- However, the time is now, to go beyond and exceed the safety challenge. I urge everybody here tonight to make a greater commitment to safety in your businesses.
- I believe safety is good business, but most importantly, safety says you care about your customers.
- Thank you for the opportunity to speak with you tonight.

###